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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,326	02/26/2002	Briand Danick	BERGLUNDS P9918	6935

7590

09/29/2003

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EXAMINER

FASTOVSKY, LEONID M

ART UNIT	PAPER NUMBER
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3742

DATE MAILED: 09/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/009,326

Applicant(s)

DANICK ET AL.

Examiner

Leonid M Fastovsky

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.
3. The disclosure is objected to because of the following informalities: Page 8 is missing.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4, 6, 8, 11, and 20-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Semancik et al (5,345,213).

Semancik teaches a micro-hotplate device (Figures 1-6), a support substrate 12, a membrane 2- 3, an island 8 attached to the membrane and isolated from the membrane by insulating material 13, a heating element 5, and leads 9 allowing for temperature

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sensing by measuring resistivity of the island 8 (Col.7, lines 50-68, Col. 8, lines 50-68, Col. 9, lines 1-2, and claim 1), and array of micro-hot plates (Col. 10, lines 7-15).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Semancik in view of Goessler et al (5,103,077).

Semavick discloses substantially the claimed feature except a diode. Goessler shows a diode 44. It would have been obvious to one having ordinary skill in the art to adapt a modified invention of Semanick to include a diode as taught by Goessler to sense a temperature.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Semanick in view of Giedd et al (5,753,523).

Semanick disclose substantially the claimed feature except an insulator being a silicon nitride. Giedd shows an insulator being a silicon nitride (Col. 7, lines 51-55). It would have been obvious to one having ordinary skill to adapt a modified invention of Semanick to use an insulator as taught by Giedd to improve performance of the device.

9. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Semanick in view of Russell et al (6,406,984).

Semanick discloses substantially the claimed features except a semiconductor being a silicon carbide. Russell shows a semiconductor material made out of a silicon carbide (claim 3). It would have been obvious to one having ordinary skill in the art to adapt a modified invention of Semanick to use a silicon carbide as taught by Russell to improve performance of the device.

10. Claims 12-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Semanick in view of Peng et al (6,251,794) and Mansell et al (6,108,121).

Semanick discloses substantially the claimed features except masking and various types of etching. Peng shows a masking step (Col.4, lines 30-35) and Mansell shows potassium hydroxide, ammonium hydroxide and ion etching (Col. 5, lines 52-65). It would have been obvious to one having ordinary skill in the art to adapt a modified invention of Semanick to use masking step as taught by Peng and etching steps as taught by Mansell to optimize a fabrication of the device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid M Fastovsky whose telephone number is 703-306-5482. The examiner can normally be reached on M-Th. 8.00 am -6.00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sang Paik can be reached on 703-308-1147. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0861.

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Leonid M Fastovsky
Examiner
Art Unit 3742

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SANG Y. PAIK
PRIMARY EXAMINER

S. P. Y.